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(FILE 'HOME' ENTERED AT 10:59:06 ON 03 MAR 2003)

FILE 'REGISTRY' ENTERED AT 11:00:37 ON 03 MAR 2003

L1 49622 S 5<SQL<21 AND (CYCL? OR BRIDGE)/NTE  
L2 40221 S L1 NOT TERMINAL/NTE  
L3 35963 S L2 NOT CYS-1/NTE

=> d sqd,bib 30000,30010,30020, 30100,30200,30300,  
30400,30500,30600,30700,30800,30900, 31000,32000,33000,34000,35000

L3 ANSWER 30000 OF 35963 REGISTRY COPYRIGHT 2003 ACS  
RN 112599-12-9 REGISTRY  
FS PROTEIN SEQUENCE  
SQL 10,5,5  
NTE multichain  
modified (modifications unspecified)

type	location	description
bridge	Thr-1 - Thr-1'	covalent bridge, dimer
bridge	Thr-1 - Val-5	lactone
bridge	Thr-1' - Val-5'	lactone
uncommon	Sar-4 -	-
uncommon	Sar-4' -	-
stereo	Val-2 -	D
stereo	Val-2' -	D

SEQ 1 TVPXV

SEQ 1 TVPXV

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1

AN 108:150968 CA  
TI Synthesis and biological properties of actinomycin D chromophoric analogs substituted at carbon 7 with aziridine and cyclopropyl functions  
AU Sehgal, Raj K.; Almassian, Bijan; Rosenbaum, David P.; Zadrozny, Ruth; Sengupta, Sisir K.  
CS Sch. Med., Boston Univ., Boston, MA, 02118, USA  
SO Journal of Medicinal Chemistry (1988), 31(4), 790-3  
CODEN: JMCMAR; ISSN: 0022-2623  
DT Journal  
LA English

L3 ANSWER 30010 OF 35963 REGISTRY COPYRIGHT 2003 ACS  
RN 112506-30-6 REGISTRY  
FS PROTEIN SEQUENCE; STEREOSEARCH  
SQL 9  
NTE modified (modifications unspecified)

type	location	description
bridge	Asp-5 - Dpr-9	lactam
uncommon	Dpr-9 -	-
stereo	Ala-1 -	D
stereo	Phe-2 -	D
stereo	Trp-3 -	D
stereo	Arg-6 -	D

SEQ 1 AFWSDRLRX

REFERENCE 1

AN 108:94935 CA  
 TI Design of potent cyclic gonadotropin releasing hormone antagonists  
 AU Rivier, J.; Kupryszewski, G.; Varga, J.; Porter, J.; Rivier, C.; Perrin, M.; Hagler, A.; Struthers, S.; Corrigan, A.; Vale, W.  
 CS Salk Inst., Clayton Found. Lab. Pept. Biol., La Jolla, CA, 92037, USA  
 SO Journal of Medicinal Chemistry (1988), 31(3), 677-82  
 CODEN: JMCMAR; ISSN: 0022-2623  
 DT Journal  
 LA English

L3 ANSWER 30020 OF 35963 REGISTRY COPYRIGHT 2003 ACS  
 RN 112501-31-2 REGISTRY  
 FS PROTEIN SEQUENCE; STEREOSEARCH  
 SQL 8,4,4  
 NTE multichain  
 modified (modifications unspecified)

type	location	description
bridge	Cys-3 - Cys-3'	disulfide bridge, dimer

SEQ 1 EDCK

SEQ 1 EDCK

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1

AN 109:73924 CA  
 TI Preparation of cysteine-containing peptide dimers as hemopoiesis stimulants  
 IN Laerum, Ole Didrik  
 PA Nycomed A/S, Norway  
 SO Eur. Pat. Appl., 15 pp.  
 CODEN: EPXXDW  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 267741	A1	19880518	EP 1987-309806	19871105
	EP 267741	B1	19920624		
	R: ES, GR				
	WO 8803535	A1	19880519	WO 1987-GB784	19871105
	W: AU, DK, FI, GB, JP, NO, US				
	RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE				
	AU 8781747	A1	19880601	AU 1987-81747	19871105
	AU 604279	B2	19901213		
	EP 330667	A1	19890906	EP 1987-907244	19871105
	R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
	JP 02500517	T2	19900222	JP 1987-506666	19871105
	AT 77628	E	19920715	AT 1987-309806	19871105
	ES 2038675	T3	19930801	ES 1987-309806	19871105
	CA 1337407	A1	19951024	CA 1987-551089	19871105
	ZA 8708349	A	19880727	ZA 1987-8349	19871106
	US 4987122	A	19910122	US 1988-206341	19880617
	DK 8803698	A	19880704	DK 1988-3698	19880704
	DK 171992	B1	19970908		
	NO 8803008	A	19880705	NO 1988-3008	19880705

NO 164479            B     19900702  
 NO 164479            C     19901010  
 FI 8902185           A     19890505            FI 1989-2185            19890505  
 FI 92209             B     19940630  
 FI 92209             C     19941010  
 PRAI GB 1986-26539    19861106  
       EP 1987-309806   19871105  
       WO 1987-GB784    19871105

REFERENCE 2

AN 108:49956 CA  
 TI Hemoregulatory peptide synthesis, purification of tritium labeled peptide and uptake of peptide in hematopoietic tissues in vitro  
 AU Eriksen, Jon Amud; Schanche, Jon Sverre; Hestdal, Kjetil; Jakobsen, Sten Eirik; Tveteraas, Trygve; Johansen, Jon Henrik; Paukovits, Walter R.; Laerum, Ole D.  
 CS Nycomed, Oslo, N-0401, Norway  
 SO Colloque INSERM (1987), 162 (Inhib. Hematopoiesis), 51-4  
    CODEN: CINMDE; ISSN: 0768-3154  
 DT Journal  
 LA English  
  
 L3 ANSWER 30100 OF 35963 REGISTRY COPYRIGHT 2003 ACS  
 RN 111982-70-8 REGISTRY  
 FS PROTEIN SEQUENCE; STEREOSEARCH  
 SQL 7  
 NTE **cyclic**  
     modified (modifications unspecified)

type	location			description
uncommon	Bas-4	-	-	
uncommon	Oaa-6	-	-	
uncommon	Ggu-7	-	-	
stereo	Ala-2	-		D
stereo	Bas-4	-		D
stereo	Ggu-7	-		D

SEQ 1 AAFXRXX

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1

AN 138:28657 CA  
 TI Fate of microcystin in Lake Suwa  
 AU Park, Ho-Dong; Yokoyama, Atsushi; Okino, Tokio  
 CS Department of Environmental Sciences, Faculty of Science, Shinshu University, Matsumoto, 390-8621, Japan  
 SO Rikusuigaku Zasshi (2001), 62(3), 229-248  
    CODEN: RIZAAU; ISSN: 0021-5104  
 PB Nippon Rikusuui Gakkai  
 DT Journal  
 LA Japanese

REFERENCE 2

AN 134:2389 CA  
 TI Isolation and identification of seven microcystins from a cultured M.TN-2 strain of Microcystis aeruginosa  
 AU Lee, Tzong-Huei; Chou, Hong-Nong  
 CS Institute of Botany, Academia Sinica, Taipei, 11529, Taiwan

SO Botanical Bulletin of Academia Sinica (2000), 41(3), 197-202  
CODEN: BBASA6; ISSN: 0006-8063  
PB Academia Sinica, Institute of Botany  
DT Journal  
LA English  
RE.CNT 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

REFERENCE 3

AN 129:99599 CA  
TI First identification of microcystins in Irish lakes aided by a new  
derivatization procedure for electrospray mass spectrometric analysis  
AU Sherlock, Ian R.; James, Kevin J.; Caudwell, F. Barry; Mackintosh, Carol  
CS Ecotoxicology Research Unit, Chemistry Department, Cork Institute of  
Technology, Cork, Ire.  
SO Natural Toxins (1998), Volume Date 1997, 5(6), 247-254  
CODEN: NATOEE; ISSN: 1056-9014  
PB Wiley-Liss, Inc.  
DT Journal  
LA English  
RE.CNT 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

REFERENCE 4

AN 126:208385 CA  
TI Seven microcystins from Microcystis water bloom in Lake Dalai, China  
AU He, Zhenrong; He, Jiawan; Yu, Minjuan; Qiao, Mingye; Shen, Zhi; Wu,  
Liandi; Wu, Suozhu; Guo, Yunfeng; Kondo, Fumio; Harada, Ken-Ichi  
CS Institute of Hydrobiology, Chinese Academy of Sciences, Wuhan, 430072,  
Peop. Rep. China  
SO Journal of Environmental Sciences (China) (1997), 9(1), 113-119  
CODEN: JENSEE; ISSN: 1001-0742  
PB Science Press  
DT Journal  
LA English

REFERENCE 5

AN 125:338125 CA  
TI Cyanobacterial toxins in water  
AU Sadler, Ross  
CS Government Chem. Lab., Coopers Plains, Australia  
SO Proceedings of International Seminar on Water and Environment, Katmandu,  
Nepal, Mar. 30-Apr. 1, 1994 (1994), 88-99. Editor(s): Chitrakar, Ramesh.  
Publisher: Nepal Chemical Society, Katmandu, Nepal.  
CODEN: 63KXAC  
DT Conference; General Review  
LA English

REFERENCE 6

AN 123:314518 CA  
TI Seven More Microcystins from Homer Lake Cells: Application of the General  
Method for Structure Assignment of Peptides Containing  
.alpha.,.beta.-Dehydroamino Acid Unit(s)  
AU Namikoshi, Michio; Sun, Furong; Choi, Byoung Wook; Rinehart, Kenneth L.;  
Carmichael, Wayne W.; Evans, William R.; Beasley, Val R.  
CS Roger Adams Laboratory, University of Illinois, Urbana, IL, 61801, USA  
SO Journal of Organic Chemistry (1995), 60(12), 3671-9  
CODEN: JOCEAH; ISSN: 0022-3263  
PB American Chemical Society  
DT Journal

LA English

REFERENCE 7

AN 119:110937 CA  
TI Structural modifications imparting reduced toxicity in microcystins from *Microcystis* spp.  
AU Stotts, Richard R.; Namikoshi, Michio; Haschek, Wanda M.; Rinehart, Kenneth L.; Carmichael, Wayne W.; Dahlem, Andrew M.; Beasley, Val R.  
CS Dep. Vet. Biosci., Univ. Illinois, Urbana, IL, 61801, USA  
SO *Toxicon* (1993), 31(6), 783-9  
CODEN: TOXIA6; ISSN: 0041-0101  
DT Journal  
LA English

REFERENCE 8

AN 118:227626 CA  
TI Liquid chromatography-electrospray ionization-mass spectrometry of cyanobacterial toxins  
AU Poon, G. K.; Griggs, L. J.; Edwards, C.; Beattie, K. A.; Codd, G. A.  
CS Drug Dev. Sect., Cancer Res. Campaign Lab., Inst. Cancer Res., Belmont Sutton Surrey, SM2 5NG, UK  
SO *Journal of Chromatography* (1993), 628(2), 215-33  
CODEN: JOCRAM; ISSN: 0021-9673  
DT Journal  
LA English

REFERENCE 9

AN 116:124498 CA  
TI Identification of 12 hepatotoxins from a Homer Lake bloom of the cyanobacteria *Microcystis aeruginosa*, *Microcystis viridis*, and *Microcystis wesenbergii*: nine new microcystins  
AU Namikoshi, Michio; Rinehart, Kenneth L.; Sakai, Ryuichi; Stotts, Richard R.; Dahlem, Andrew M.; Beasley, Val R.; Carmichael, Wayne W.; Evans, William R.  
CS Roger Adams Lab., Univ. Illinois, Urbana, IL, 61801, USA  
SO *Journal of Organic Chemistry* (1992), 57(3), 866-72  
CODEN: JOCEAH; ISSN: 0022-3263  
DT Journal  
LA English

REFERENCE 10

AN 113:177781 CA  
TI Environmental factors affecting the production of peptide toxins in floating scums of the cyanobacterium *Microcystis aeruginosa* in a hypertrophic African reservoir  
AU Wicks, Richard J.; Thiel, Pieter G.  
CS Div. Water Technol., CSIR, Pretoria, 0001, S. Afr.  
SO *Environmental Science and Technology* (1990), 24(9), 1413-18  
CODEN: ESTHAG; ISSN: 0013-936X  
DT Journal  
LA English

L3 ANSWER 30200 OF 35963 REGISTRY COPYRIGHT 2003 ACS  
RN 110592-27-3 REGISTRY  
FS PROTEIN SEQUENCE; STEREOSEARCH  
SQL 17  
NTE modified (modifications unspecified)

-----  
type                      location                      description  
-----

bridge	Cys-5	- Cys-14	disulfide bridge
modification	Trp-15	-	(2-nitrophenyl)thio<Nps>

SEQ 1 DTMRMVGGRV YRPCWEV

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

# REFERENCE 1

AN 108:183959 CA  
 TI Structure-activity studies on melanin-concentrating hormone  
 AU Kawauchi, Hiroshi; Kawazoe, Ichiro  
 CS Sch. Fish. Sci., Univ. Kitasato, Iwate, 022-01, Japan  
 SO Progress in Clinical and Biological Research (1988), 256(Adv. Pigm. Cell Res.), 517-30  
 CODEN: PCBRD2; ISSN: 0361-7742  
 DT Journal  
 LA English

# REFERENCE 2

AN 107:151526 CA  
 TI Structure-activity relationships of melanin-concentrating hormone  
 AU Kawazoe, Ichiro; Kawauchi, Hiroshi; Hirano, Tetsuya; Naito, Nobuko  
 CS Sch. Fisheries Sci., Kitasato Univ., Iwate, Japan  
 SO International Journal of Peptide & Protein Research (1987), 29(6), 714-21  
 CODEN: IJPPC3; ISSN: 0367-8377  
 DT Journal  
 LA English

L3 ANSWER 30300 OF 35963 REGISTRY COPYRIGHT 2003 ACS  
 RN 108893-81-8 REGISTRY  
 FS PROTEIN SEQUENCE; STEREOSEARCH  
 SQL 14,7,7  
 NTE multichain

type	-----	location	-----	description
bridge		Cys-2	- Cys-2'	disulfide bridge, dimer

SEQ 1 GCNSFRY

SEQ 1 GCNSFRY

# REFERENCE 1

AN 107:34028 CA  
 TI Cardiodilatin, a new peptide hormone  
 IN Forssmann, Wolf Georg  
 PA Organogen Medizinisch-Molekularbiologische Forschungsgesellschaft m.b.H., Fed. Rep. Ger.  
 SO PCT Int. Appl., 35 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA German  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 8502850	A1	19850704	WO 1984-DE279	19841221
	W: JP, US				
	RW: AT, BE, CH, DE, FR, GB, LU, NL, SE				
	DE 3346953	A1	19850814	DE 1983-3346953	19831224

DE 3346953 C2 19930603  
 EP 167575 A1 19860115 EP 1985-900447 19841221  
 EP 167575 B1 19930526  
 EP 167575 B2 19991027  
 R: AT, BE, CH, DE, FR, GB, LI, LU, NL, SE  
 JP 61500848 T2 19860501 JP 1985-500395 19841221  
 JP 08022876 B4 19960306  
 AT 89829 E 19930615 AT 1985-900447 19841221  
 JP 08022876 B4 19960306 JP 1984-500395 19841221  
 US 4751284 A 19880614 US 1985-769627 19850820  
 US 4782044 A 19881101 US 1988-140736 19880104  
 US 4895932 A 19900123 US 1988-229706 19880808  
 JP 07072146 A2 19950317 JP 1994-2150 19940113  
 JP 08224094 A2 19960903 JP 1995-260453 19951006  
 PRAI DE 1983-3346953 19831224  
 EP 1985-900447 19841221  
 WO 1984-DE279 19841221  
 US 1985-769627 19850820  
 US 1987-140736 19871231

L3 ANSWER 30400 OF 35963 REGISTRY COPYRIGHT 2003 ACS  
 RN 108318-68-9 REGISTRY  
 FS PROTEIN SEQUENCE  
 SQL 6  
 NTE modified

type	location	description
bridge	Abu-3 - Cys-6	carba sulfide bridge
uncommon	Abu-3 -	-
stereo	Thr-1 -	D

SEQ 1 TAXCHC

REFERENCE 1

AN 113:212645 CA  
 TI Synthetic study on peptide antibiotic nisin. IV. Synthesis of ring D-E  
 AU Fukase, Koichi; Oda, Yoshiaki; Kubo, Akira; Wakamiya, Tateaki; Shiba, Tetsuo  
 CS Fac. Sci., Osaka Univ., Toyonaka, 560, Japan  
 SO Bulletin of the Chemical Society of Japan (1990), 63(6), 1758-63  
 CODEN: BCSJA8; ISSN: 0009-2673  
 DT Journal  
 LA English

REFERENCE 2

AN 106:214349 CA  
 TI The synthesis of ring D-E in peptide antibiotic nisin  
 AU Fukase, Koichi; Oda, Yoshiaki; Wakamiya, Tateaki; Shiba, Tetsuo  
 CS Fac. Sci., Osaka Univ., Toyonaka, 560, Japan  
 SO Peptide Chemistry (1986), Volume Date 1985, 23rd, 157-62  
 CODEN: PECHDP; ISSN: 0388-3698  
 DT Journal  
 LA English

L3 ANSWER 30500 OF 35963 REGISTRY COPYRIGHT 2003 ACS  
 RN 107132-97-8 REGISTRY  
 FS PROTEIN SEQUENCE; STEREOSEARCH  
 SQL 10  
 NTE cyclic



SEQ 1 ALKLPALKLP

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1

AN 121:129753 CA  
TI Quantitative Structure-Hydrophobicity and Structure-Activity Relationships  
of Antibacterial Gramicidin S Analogs  
AU Katayama, Tadashi; Nakao, Kazuya; Akamatsu, Miki; Ueno, Tamio; Fujita,  
Toshio  
CS Department of Agricultural Chemistry, Kyoto University, Kyoto, 606-01,  
Japan  
SO Journal of Pharmaceutical Sciences (1994), 83(9), 1357-62  
CODEN: JPMSAE; ISSN: 0022-3549  
DT Journal  
LA English

REFERENCE 2

AN 106:120207 CA  
TI Design and synthesis of gramicidin S analogs with high antibiotic activity  
AU Sato, Kazuki; Nagai, Ukon  
CS Mitsubishi-Kasei Inst. Life Sci., Tokyo, 194, Japan  
SO Peptide Chemistry (1986), Volume Date 1985, 23rd, 217-22  
CODEN: PECHDP; ISSN: 0388-3698  
DT Journal  
LA English

L3 ANSWER 30600 OF 35963 REGISTRY COPYRIGHT 2003 ACS  
RN 105263-68-1 REGISTRY  
FS PROTEIN SEQUENCE; STEREOSEARCH  
SQL 7  
NTE

type	location	description
bridge	Cys-2 - Cys-7	disulfide bridge

SEQ 1 DCFWKYC

REFERENCE 1

AN 135:24669 CA  
TI Urotensin-II analogs for treatment of stroke  
IN Dhanak, Dashyant; Knight, Steven D.; Warren, Gregory L.  
PA Smithkline Beecham Corporation, USA  
SO PCT Int. Appl., 24 pp.  
CODEN: PIXXD2  
DT Patent  
LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001037780	A2	20010531	WO 2000-US32408	20001129
	W: CA, JP, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
	EP 1233774	A1	20020828	EP 2000-980842	20001129
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR				
PRAI	US 1999-168141P		19991129		
	WO 2000-US32408		20001129		

# REFERENCE 2

AN 106:150240 CA  
 TI Contraction of major artery segments of rat by fish neuropeptide urotensin II  
 AU Itoh, Hiroo; Itoh, Yasuko; Rivier, Jean; Lederis, Karl  
 CS Fac. Med., Univ. Calgary, Calgary, AB, T2N 4N1, Can.  
 SO American Journal of Physiology (1987), 252(2, Pt. 2), R361-R366  
 CODEN: AJPHAP; ISSN: 0002-9513  
 DT Journal  
 LA English

# REFERENCE 3

AN 105:206560 CA  
 TI Characterization of the biologically and antigenically important regions of urotensin II  
 AU McMaster, D.; Kobayashi, Y.; Rivier, J.; Lederis, K.  
 CS Dep. Pharmacol. Ther., Univ. Calgary, Calgary, AB, T2N 4N1, Can.  
 SO Proceedings of the Western Pharmacology Society (1986), 29, 205-8  
 CODEN: PWPSA8; ISSN: 0083-8969  
 DT Journal  
 LA English

L3 ANSWER 30700 OF 35963 REGISTRY COPYRIGHT 2003 ACS  
 RN 104302-63-8 REGISTRY  
 FS PROTEIN SEQUENCE; STEREOSEARCH  
 SQL 8  
 NTE **cyclic**  
 modified (modifications unspecified)

type	location			description
uncommon	Sar-2	-	-	
uncommon	Sar-4	-	-	
uncommon	Sar-6	-	-	
uncommon	Sar-8	-	-	
modification	Lys-1	-		(phenylmethoxy) carbonyl<Z>
modification	Lys-3	-		(phenylmethoxy) carbonyl<Z>
modification	Lys-5	-		(phenylmethoxy) carbonyl<Z>
modification	Lys-7	-		(phenylmethoxy) carbonyl<Z>

SEQ 1 KKKKKKKX

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

# REFERENCE 1

AN 115:108774 CA  
 TI Allosteric regulation by calcium dication of hydrophobic pocket constituted by using cyclic peptide as template  
 AU Kimura, Shunsaku; Imanishi, Yukio  
 CS Dep. Polym. Chem., Kyoto Univ., Kyoto, 606, Japan  
 SO Peptide Chemistry (1991), 28th, 183-6  
 CODEN: PECHDP; ISSN: 0388-3698  
 DT Journal  
 LA English

# REFERENCE 2

AN 111:111294 CA  
 TI Calcium transport through lipid membrane by diastereomer cyclic

octapeptides  
 AU Kimura, Shunsaku; Ozeki, Eiichi; Imanishi, Yukio  
 CS Dep. Polym. Chem., Kyoto Univ., Kyoto, 606, Japan  
 SO Biopolymers (1989), 28(7), 1247-57  
 CODEN: BIPMAA; ISSN: 0006-3525  
 DT Journal  
 LA English

REFERENCE 3

AN 109:124493 CA  
 TI Calcium transport through lipid membranes by cyclic octapeptides  
 AU Kimura, Shunsaku; Imanishi, Yukio  
 CS Dep. Polym. Chem., Kyoto Univ., Kyoto, 606, Japan  
 SO Peptide Chemistry (1988), Volume Date 1987 721-4  
 CODEN: PECHDP; ISSN: 0388-3698  
 DT Journal  
 LA English

REFERENCE 4

AN 105:129517 CA  
 TI Calcium ion transport through lipid membrane by cyclic octapeptide  
 cyclo[-Lys(Z)-Sar-Leu-Sar-Leu-Sar-Leu-Sar-]  
 AU Kimura, Shunsaku; Imanishi, Yukio  
 CS Dep. Polym. Chem., Kyoto Univ., Kyoto, 606, Japan  
 SO Peptide Chemistry (1986), Volume Date 1985, 23rd, 273-6  
 CODEN: PECHDP; ISSN: 0388-3698  
 DT Journal  
 LA English

L3 ANSWER 30800 OF 35963 REGISTRY COPYRIGHT 2003 ACS  
 RN 103952-36-9 REGISTRY  
 FS PROTEIN SEQUENCE  
 SQL 8,4,4  
 NTE multichain

type	location	description
bridge	Ala-4 - Ala-4'	covalent bridge, dimer
stereo	Ala-2 -	D
stereo	Ala-4 -	D

SEQ 1 YAF A

SEQ 1 YAF A

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1

AN 105:115413 CA  
 TI Biologically active peptides and pharmaceutical compositions  
 IN DeCastiglione, Roberto; Perseo, Giuseppe; Mena, Renzo; Cervini, Maria  
 Antonietta; Rossi, Alessandro  
 PA Farmitalia Carlo Erba S.p.A., Italy  
 SO Eur. Pat. Appl., 52 pp.  
 CODEN: EPXXDW  
 DT Patent  
 LA English  
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----

PI EP 175323 A2 19860326 EP 1985-111688 19850916  
 EP 175323 A3 19890208  
 EP 175323 B1 19920429  
 R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE  
 AT 75485 E 19920515 AT 1985-111688 19850916  
 JP 61078800 A2 19860422 JP 1985-205492 19850919  
 PRAI GB 1984-23771 19840920  
 US 1985-745932 19850618  
 EP 1985-111688 19850916

L3 ANSWER 30900 OF 35963 REGISTRY COPYRIGHT 2003 ACS  
 RN 103290-20-6 REGISTRY  
 FS PROTEIN SEQUENCE  
 SQL 9  
 NTE **cyclic**

type	location	description
uncommon	Orn-5	-
uncommon	Oaa-6	-
uncommon	Orn-9	-

SEQ 1 LFPVXXPVX

**\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\***

REFERENCE 1

AN 105:60927 CA  
 TI Synthesis of gramicidin S (GS) analogs, [3-4-.delta.Ava]-GS and [3-4,3'-4'-bis(.delta.Ava)]-GS (.delta.Ava = 5-aminovaleric acid)  
 AU Sofuku, Shosuke; Sugiyama, Yasutaro; Muramatsu, Ichiro  
 CS Coll. Sci., Rikkyo Univ., Tokyo, 171, Japan  
 SO Bulletin of the Chemical Society of Japan (1986), 59(1), 185-90  
 CODEN: BCSJA8; ISSN: 0009-2673  
 DT Journal  
 LA English

L3 ANSWER 31000 OF 35963 REGISTRY COPYRIGHT 2003 ACS  
 RN 102255-14-1 REGISTRY  
 FS PROTEIN SEQUENCE; STEREOSEARCH  
 SQL 6  
 NTE

type	location	description
bridge	Lys-1 - Glu-6	lactam

SEQ 1 KTIHPE

REFERENCE 1

AN 113:153010 CA  
 TI Synthesis and study of cyclic analogs of angiotensin  
 AU Ancans, J.; Biseniece, D.; Vosekalna, I.; Myshliakova, N.; Chipens, G.  
 CS Inst. Org. Synth., Riga, USSR  
 SO Bioorganicheskaya Khimiya (1990), 16(3), 358-69  
 CODEN: BIKHD7; ISSN: 0132-3423  
 DT Journal  
 LA Russian

REFERENCE 2

AN 104:205065 CA  
 TI Antigenic activity of angiotensin cycloanalogs  
 AU Zalitis, G.; Afanas'eva, G. A.; Ancans, J.; Biseniece, D.; Vegners, R.;  
 Cipens, G.  
 CS Inst. Org. Sint., Riga, USSR  
 SO Latvijas PSR Zinatnu Akademijas Vestis (1986), (2), 87-93  
 CODEN: LZAVAL; ISSN: 0023-8929  
 DT Journal  
 LA Russian

L3 ANSWER 32000 OF 35963 REGISTRY COPYRIGHT 2003 ACS  
 RN 88586-15-6 REGISTRY  
 FS PROTEIN SEQUENCE  
 SQL 14  
 NTE modified (modifications unspecified)

type	location	description
bridge	Thr-5 - Asp-14	lactone
uncommon	Orn-7	-
stereo	Phe-1	D
stereo	Ala-9	D
stereo	Ser-12	D

SEQ 1 FWDDTGXDAD GSID

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1

AN 101:38829 CA  
 TI Cyclic peptide derivatives  
 IN Abbott, Bernard John; Debono, Manuel; Fukuda, David Shuichi  
 PA Lilly, Eli, and Co. , USA  
 SO Brit. UK Pat. Appl., 64 pp.  
 CODEN: BAXXDU  
 DT Patent  
 LA English  
 FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	GB 2120257	A1	19831130	GB 1983-13471	19830516
	GB 2120257	B2	19850605		
	US 4396543	A	19830802	US 1982-380499	19820521
	US 4399067	A	19830816	US 1982-380498	19820521
	ZA 8303451	A	19841224	ZA 1983-3451	19830513
	CA 1200777	A1	19860218	CA 1983-428102	19830513
	CA 1216579	A1	19870113	CA 1983-428101	19830513
	RO 86722	B3	19850417	RO 1983-110958	19830516
	RO 86724	B3	19850417	RO 1983-110960	19830516
	AT 8301782	A	19860115	AT 1983-1782	19830516
	AT 381103	B	19860825		
	AT 8301785	A	19960815	AT 1983-1785	19830516
	AT 402299	B	19970325		
	DK 8302210	A	19831122	DK 1983-2210	19830518
	DK 8302211	A	19831122	DK 1983-2211	19830518
	FI 8301748	A	19831122	FI 1983-1748	19830518
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	FI 79545	C	19900110		
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ES 522562	A1	19841216	ES 1983-522562	19830519
ES 522560	A1	19850116	ES 1983-522560	19830519
HU 30775	O	19840328	HU 1983-1795	19830520
HU 195839	B	19880728		
HU 30623	O	19840328	HU 1983-1796	19830520
HU 193039	B	19870828		
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DD 210285	A5	19840606	DD 1983-251129	19830520
PL 142112	B1	19870930	PL 1983-242098	19830520
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US 4524135	A	19850618	US 1984-637666	19840803
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US 4537717	A	19850827	US 1984-652695	19840921
PRAI US 1982-380497		19820521		
US 1982-380498		19820521		
US 1982-380499		19820521		
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US 1983-493446		19830613		
US 1984-573901		19840126		
US 1984-575648		19840131		

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AN 100:68739 CA  
 TI Derivatives of A-21978C cyclic peptides  
 IN Debono, Manuel  
 PA Lilly, Eli, and Co. , USA  
 SO U.S., 24 pp.  
 CODEN: USXXAM  
 DT Patent  
 LA English  
 FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	US 4396543	A	19830802	US 1982-380499	19820521
	CA 1216580	A1	19870113	CA 1983-428103	19830513
	AU 8314566	A1	19831124	AU 1983-14566	19830516
	AU 553875	B2	19860731		
	EP 95295	A1	19831130	EP 1983-302744	19830516
	EP 95295	B1	19870114		
	R: BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
	GB 2120257	A1	19831130	GB 1983-13471	19830516
	GB 2120257	B2	19850605		
	RO 86723	B3	19850417	RO 1983-110959	19830516
	AT 8301784	A	19860115	AT 1983-1784	19830516
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	DK 8302212	A	19831122	DK 1983-2212	19830518
	FI 8301747	A	19831122	FI 1983-1747	19830518
	ES 522559	A1	19840901	ES 1983-522559	19830519
	JP 58213744	A2	19831212	JP 1983-89917	19830520
	JP 07005638	B4	19950125		
	HU 29652	O	19840228	HU 1983-1797	19830520
	HU 193528	B	19871028		
	DD 210258	A5	19840606	DD 1983-251130	19830520
	AU 8431335	A1	19841122	AU 1984-31335	19840731
	AU 586611	B2	19890720		
	US 32311	E	19861216	US 1985-780130	19850925
PRAI	US 1982-380497		19820521		
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	US 1982-380499		19820521		
	US 1982-382012		19820521		

L3 ANSWER 33000 OF 35963 REGISTRY COPYRIGHT 2003 ACS  
 RN 77300-54-0 REGISTRY  
 FS PROTEIN SEQUENCE; STEREOSEARCH  
 SQL 9,6,3  
 NTE multichain

type	location	description
bridge	Cys-5 - Cys-2'	disulfide bridge

SEQ 1 LYLVCG

SEQ 1 YCN

REFERENCE 1

AN 96:7093 CA  
 TI Cystine peptides with an insulin-like effect  
 IN Losse, Guenter; Stange, Hans  
 PA Ger. Dem. Rep.  
 SO Ger. (East), 12 pp.  
 CODEN: GEXXA8  
 DT Patent  
 LA German  
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI DD 147942	Z	19810429	DD 1979-215100	19790820
PRAI DD 1979-215100		19790820		

REFERENCE 2

AN 94:175536 CA  
 TI Synthesis of cystine peptides with a primary structure related to the active region of insulin  
 AU Losse, Guenter; Stange, Hans; Naumann, Wolfgang  
 CS Sekt. Chem., Tech. Univ. Dresden, Dresden, DDR-8027, Ger. Dem. Rep.  
 SO Liebigs Annalen der Chemie (1981), (1), 143-51  
 CODEN: LACHDL; ISSN: 0170-2041  
 DT Journal  
 LA German

L3 ANSWER 34000 OF 35963 REGISTRY COPYRIGHT 2003 ACS  
 RN 64472-09-9 REGISTRY  
 FS PROTEIN SEQUENCE; STEREOSEARCH  
 SQL 9,8,1  
 NTE multichain  
     cyclic,linear  
     modified (modifications unspecified)

type	location	description
stereo	Pro-1'	D

SEQ 1 GPGPGPGP

SEQ 1 P

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

AN 87:152542 CA  
 TI Cyclic peptides. 17. Metal and amino acid complexes of cyclo(Pro-Gly)<sub>4</sub> and analogs studied by nuclear magnetic resonance and circular dichroism

AU Madison, Vincent; Deber, Charles M.; Blout, Elkan R.  
CS Dep. Biol. Chem., Harvard Med. Sch., Boston, MA, USA  
SO Journal of the American Chemical Society (1977), 99(14), 4788-98  
CODEN: JACSAT; ISSN: 0002-7863  
DT Journal  
LA English

L3 ANSWER 35000 OF 35963 REGISTRY COPYRIGHT 2003 ACS  
RN 37662-07-0 REGISTRY  
FS PROTEIN SEQUENCE; STEREOSEARCH  
SQL 10  
NTE cyclic

SEQ 1 AYFPPFFVPP

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AN 92:123749 CA  
TI Carbon-13-NMR-spectra of antamanide, several analogs and their alkali ion complexes  
AU Pook, Karl Heinz; Nassal, Michael; Birr, Christian; Wieland, Theodor  
CS Anal. Res. Dep., C. H. Boehringer Sohn, Ingelheim, Fed. Rep. Ger.  
SO International Journal of Peptide & Protein Research (1980), 15(1), 32-40  
CODEN: IJPPC3; ISSN: 0367-8377  
DT Journal  
LA English

REFERENCE 2

AN 80:83657 CA  
TI Cyclic decapeptides  
IN Wieland, Theodor; Rietzel, Christian; Birr, Christian  
PA Boehringer, C. H., Sohn  
SO Ger. Offen., 10 pp. Addn. to Ger. Offen. 2,130,410.  
CODEN: GWXXBX  
DT Patent  
LA German

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2256100	A1	19731220	DE 1972-2256100	19721116
	US 3793304	A	19740219	US 1972-261256	19720609
PRAI	US 1972-261256		19720609		
	DE 1971-2130410		19710618		

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AN 78:111769 CA  
TI Liver protecting 5-, 6-, 9-, and 10-L-tyrosine-antamanides  
IN Wieland, Theodor; Rietzel, Christian; Birr, Christian  
PA Boehringer, C. H., Sohn  
SO Ger. Offen., 20 pp.  
CODEN: GWXXBX  
DT Patent  
LA German

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2130410	A1	19730125	DE 1971-2130410	19710618
	US 3793304	A	19740219	US 1972-261256	19720609
	CH 591427	A	19770915	CH 1972-8962	19720615
	NL 7208241	A	19721220	NL 1972-8241	19720616



GB 1391688	A	19750423	GB 1972-28363	19720616
ES 403938	A1	19750516	ES 1972-403938	19720616
FR 2142082	A1	19730126	FR 1972-22042	19720619
PRAI DE 1971-2130410 19710618				

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AN 77:140505 CA  
 TI Antamanide. XV. Derivatives at the phenolic side chain of tyrosine6- and tyrosine5-antamanide  
 AU Wieland, Theodor; Rietzel, Christian; Seeliger, Annemarie  
 CS Abt. Chem., Max-Planck-Inst. Med. Forsch., Heidelberg, Fed. Rep. Ger.  
 SO Justus Liebigs Annalen der Chemie (1972), 759, 63-70  
 CODEN: JLACBF; ISSN: 0075-4617  
 DT Journal  
 LA German

REFERENCE 5

AN 77:88828 CA  
 TI Antamanide. XI. Merrifield synthesis of tyrosine-containing analogs of antamanide  
 AU Wieland, Theodor; Birr, Christian; Frodl, Reinhilt; Lochinger, Werner; Stahnke, Gisela  
 CS Abt. Chem., Max Planck Inst. Med. Forsch., Heidelberg, Fed. Rep. Ger.  
 SO Justus Liebigs Annalen der Chemie (1972), 757, 136-46  
 CODEN: JLACBF; ISSN: 0075-4617  
 DT Journal  
 LA German